

What is claimed is:

1. A filtration cassette comprising a first and second filtration media layer and a first, second, and third porous screen, said first and second screens
5 defining a first and second feed/retentate passageway and said third screen defining a filtrate passageway, said first, second and third screens and said first and second filtration media layers each defining a plurality of feed/retentate apertures and filtrate apertures to be positioned in respective
10 overlying registry so as to be in unobstructed fluid communication with the feed/retentate passageway and the filtrate passageway, respectively, the filtration cassette further comprising a sealing resin positioned about the filtration media and the screens in a manner to render the feed/retentate passageways in obstructed fluid communication with the filtrate
15 passageways through said filter media, said sealing resin extending into said fluid passageways so as to define at least a portion of one fluid channel in each said passageway.
2. The filtration cassette of claim 1, wherein said sealing resin extends along the perimetrical edges and apertures of said feed/retentate and filtrate
20 screens.
3. The filtration cassette of claim 1, wherein said sealing resin extends into said passageways so as to eliminate the formation of non-uniformities in fluid flow therethrough.
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4. The filtration cassette of claim 1, wherein said screens define apertures shaped so as to positively direct the resin during vacuum drawing to a desired location in the flow channels.
- 30 5. The filtration cassette of claim 1, wherein said screen further includes a shaped perimetrical edge which also assists in the drawing of said flowable resin thereinto.

6. The filtration cassette of claim 1, wherein said feed/retentate apertures are shaped to be symmetrical only about the longitudinal axis of said filtrate screen.
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7. The filtration cassette of claim 1, wherein said filtrate apertures are shaped to be symmetrical only about the longitudinal axis of said feed/retentate screen.
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8. The filtration cassette of claim 1, wherein said feed/retentate apertures are shaped to be symmetrical only about three axes.
9. The filtration cassette of claim 1, wherein said filtrate apertures are shaped to be symmetrical only about three axes.
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10. The filtration cassette of claim 1, wherein said feed/retentate apertures are shaped to be asymmetrical.
11. The filtration cassette of claim 1, wherein said filtrate apertures are shaped to be asymmetrical.
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